

PV power plant in the City of Križevci, Croatia

Crowdfunding and microloans



Background

Entrepreneurs cite ‘access to finance’ as the second most pressing problem for small and medium-sized enterprises (SMEs). Start-ups face the same financing problems as SMEs. The financial crisis has made this fund shortage even more problematic. Crowdfunding as a form of fundraising, sometimes called social media fundraising, stands for collecting funds from various persons to finance a project. It has bloomed along with the development of fast communication tools such as the internet, and it is perceived as an alternative method of funding for SMEs and start-ups. Crowdfunding carries the hope of helping bridge the financing gap between (small) loans from friends, family, and banks and (large) investments from venture capitalists.

Objective

Crowdfunding is the collecting of resources (funds, money, tangible goods, time) from the population at large through an Internet platform. In return for their contributions, the crowd can receive a number of tangibles or intangibles, which depend on the type of crowdfunding. Crowdfunding involves three participants: the crowd (or contributors); a crowdfunding platform; and the crowdfunding campaign creator.

Because of the very broad spectrum of investors, supporters of the “project idea”, crowdfunded projects have substantial social and environmental benefits incorporated in the outputs.

Description of the funding opportunity

This simple “bottom-up” funding opportunity allows any person with the internet connection and bank account to invest a small amount in order to help launch of a particular for-profit or non-profit project.

Campaign creators can organise their campaign in one of four ways: donation-based, reward-based, lending-based,

and equity-based. Donation-based contributors do not receive anything for their contributions. Reward-based campaigns contributors receive goods or services in exchange for their contributions. Contributors to a lending-based crowdfunding campaign receive interest payments in exchange for financing a project. Lending-based crowdfunding is a form of micro-lending, where contributors can select a project with an associated rate of return and maturation date. Finally, the contributors to equity-based crowdfunding campaigns receive shares in the venture in exchange for their contributions. Since equity-based crowdfunding platforms emit shares, they fall under the authority of individual state financial authorities. Crowdfunding campaigns are often moderated through Indiegogo or Kickstarter websites where the developers are presenting projects and investors can invest and see the results of the campaigns.

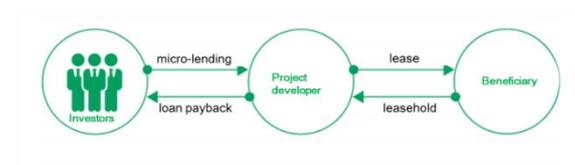


Figure a. Example of micro-lending based crowdfunding scheme for the PV power plant owned by beneficiary

Pros and cons of the crowdfunding

The main advantages of the crowdfunding are:

- Access to funds with less strings attached than with banks or venture capitalists
- More leverage in financing because campaigners can tailor the campaign to their needs
- Social insurance for innovation because crowdfunding allows investors to make small contributions; it spreads the risk of investing in new ventures over a larger population of investors

- Investor gets the feeling of being part of the community trying to reach common goals

And drawbacks...

- Disclosing enough information to obtain funds from the crowd, can detrimentally impact the value of their project
- Campaigners may suffer from the crowd mentality because “investors use the decisions of others as an informative signal of project quality”
- Fraud constitutes the biggest threat to crowdfunding campaigns.

Crowdfunding for the PV power plant in the City of Križevci, Croatia

The crowdfunding campaign helped to install 30 kWp PV (photovoltaic) power plant integrated on the roof of Križevci Development Centre and Technology Park - public institution owned by City of Križevci. The project developers – Green Energy Cooperative (ZEZ) crowdfunded the project and collected the funds from 53 citizens, investing from 135 Euro to 1000 Euro each. The minimum and maximum amounts were limited in order to secure diversity of funding subjects, and also 20 % of the investment was secured for local investors being the main beneficiaries. The total investment of 31.000 Eur was collected in 10 days during the crowdfunding campaign. Recently introduced in Croatia, electricity billing model “net metering” offers any electricity consumer to upgrade to “prosumer” and produce the renewable energy for its own needs with possibility of selling the surplus. This leads to significantly lower electricity costs and also periodic incomes when eventual surplus is sold to electricity supplier.

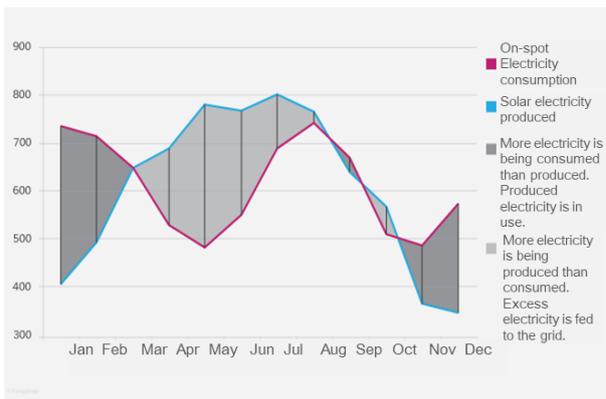


Figure b. Example of net metering– energy produced and consumed in the calendar year period

Current owner of the PV power plant is Green Energy Cooperative, lending it by contractual arrangement to Development centre for fixed fee during the 10 year period. The fee is actually the amount of savings on

electricity bill, and it allows payback to investors. This crowdfunding model is a form of micro-lending with the future periodic incomes that will guarantee investors payback with fixed interest of 4,5% in 10 year period. In this case the funds are invested transparently; showing the investor the social and environmental sustainability aspects is fulfilled. After the 10 year payback period is over, the ownership will be transferred to Development center allowing them at least 15 more years of use with the same savings.

Summary Table	
City & country	Križevci, Croatia
Investment project	Public PV power plant
Sector of SECAP	Renewable energy
Year	2018
Financing opportunity	Microloans
Energy saving	n/a
Total investment	31.000 €
Renewable energy produced	32 MWh/year
Impact on the environment	7,2 tCO ₂ /year

Measures eligible for Crowdfunding

- Investments in RES
- Investments in energy efficiency
- Investments in sustainable mobility



City of Križevci

Sources:

- <https://www.energysage.com/solar/101/net-metering-for-home-solar-panels/>
- Garry A Gabison (2015). *Understanding Crowdfunding and its Regulations, JRC Science and policy report*
- <https://zeinvest.community/krizevacki-suncani-krovovi/>

This fact sheet is part of a series on funding opportunities, which can be found here: [html-link](#)